INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

February 18, 2004

TO: Interested Parties / Applicant

RE: Counter Top Division of Forest River, Inc. / 039-18144-00587

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 9/16/03

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February 18, 2004

Mr. William G. Conway, Jr.
Counter Top Division of Forest River, Inc.
P.O. Box 3030
Elkhart, IN 46515

Re: Exempt Construction and Operation Status
039-18144-00587

Dear Mr Conway:

The application from Counter Top Division of Forest River, Inc., received on October 27, 2003, has been reviewed. Based on the data submitted and the provisions provided in 326 IAC 2-1.1-3, it has been determined that the operation of the counter top trimming and cutting source located at 16829 Hackberry Dr., Goshen, IN 46528 are classified as exempt from air pollution permit requirements.

(a) Eight (8) natural gas fired space heaters, rated at: 1.28 million British thermal units per hour, total.

(b) One (1) counter top cutting and trimming area, equipped with a cyclone for particulate control, exhausting inside the building, capacity: 400 pounds of wood counter tops per hour.

(c) One (1) counter top surface coating booth, equipped with HVLP spray applicators, capacity: 400 pounds of wood counter tops per hour.

Emission Limitations and Standards

326 IAC 6-3-2 (Particulate emission limitations, work practices, and control technologies)

(a) Pursuant to 326 IAC 6-3-2 (Particulate emission limitations, work practices, and control technologies), the particulate from the one (1) counter top cutting and trimming area equipped with a cyclone, shall be limited to 1.40 pounds per hour, at a process weight rate of 400 pounds per hour, using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Based on Appendix A, the potential PM emission rate, after controls, is:

0.710 ton/yr × (2000 lbs/ton / 8760 hrs/yr) = 0.162 lb/hr

The PM emissions from the one (1) counter top cutting and trimming area is 0.162 pounds of PM per hour, total, which is less than the allowable of 1.40 pounds of PM per hour. Therefore, the one (1) counter top cutting and trimming area is in compliance with this rule.

The cyclone does not have to be in operation at all times the one (1) counter top cutting and trimming area is in operation, in order to comply with any applicable rules.

(b) Any change or modification which would increase the actual usage of paint in the paint booth to greater than five (5.0) gallons per day shall require prior approval from the IDEM, OAQ.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

CJF/MES
cc: File - Elkhart County
Air Compliance -Paul Karkiewicz
Permit Tracking
Air Programs Section - Michele Boner

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	**Counter Top Division of Forest River, Inc.**
Source Location:	**16829 Hackberry Dr., Goshen, IN 46528**
County:	**Elkhart**
SIC Code:	**2434**
Operation Permit No.:	**039-18144-00587**
Permit Reviewer:	**Craig J. Friederich**

The Office of Air Quality (OAQ) has reviewed an application from Counter Top Division of Forest River, Inc. relating to the operation of a counter top trimming and cutting source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Eight (8) natural gas fired space heaters, rated at: 1.28 million British thermal units per hour, total.

(b) One (1) counter top cutting and trimming area, equipped with a cyclone for particulate control, exhausting inside the building, capacity: 400 pounds of wood counter tops per hour.

(c) One (1) counter top surface coating booth, equipped with HVLP spray applicators, capacity: 400 pounds of wood counter tops per hour.

New Emission Units and Pollution Control Equipment

There are no new facilities/units requiring approval during this review.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 27, 2003.

Emission Calculations

See pages 1 through 5 of 5 of Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	**Potential To Emit** (tons/year)
PM	1.54
PM_{10}	1.57
SO_2	0.003
VOC	1.97
CO	0.471
NO_X	0.561

HAPs	**Potential To Emit** (tons/year)
Toluene	1.46
Methanol	0.729
Hexane	0.239

(a) The potential to emit (as defined in 326 IAC 2-1.1-3) of all criteria pollutants qualifies this source as an Exempt operating status.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Elkhart County.

Pollutant	**Status**
PM_{10}	attainment
SO_2	attainment
NO_2	attainment

Pollutant	Status
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR Part 52.21.

(b) Elkhart County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Particulate emission limitations, work practices, and control technologies)

(a) The one (1) counter top surface coating booth, equipped with HVLP spray applicators, is not subject to the requirements of 326 IAC 6-3-2, because this booth uses less than 5.0 gallons of paint per day. Any change or modification which would increase the actual usage of paint to greater than five (5.0) gallons per day shall require prior approval from the IDEM, OAQ.

(b) Pursuant to 326 IAC 6-3-2 (Particulate emission limitations, work practices, and control technologies), the particulate from the one (1) counter top cutting and trimming area equipped with a cyclone, shall be limited to 1.40 pounds per hour, at a process weight rate of 400 pounds per hour, using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Based on Appendix A, the potential PM emission rate, after controls, is:

0.710 ton/yr × (2000 lbs/ton / 8760 hrs/yr) = 0.162 lb/hr

The PM emissions from the one (1) counter top cutting and trimming area is 0.162 pounds

of PM per hour, total, which is less than the allowable of 1.40 pounds of PM per hour. Therefore, the one (1) counter top cutting and trimming area is in compliance with this rule.

The cyclone does not have to be in operation at all times the one (1) counter top cutting and trimming area is in operation, in order to comply with any applicable rules.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

The one (1) counter top surface coating booth, equipped with HVLP spray applicators, has a potential to emit of less than fifteen (15) pounds of VOC per day. Therefore, the requirements of 326 IAC 8-2-12 are not applicable.

Conclusion

The operation of this counter top trimming and cutting source shall be subject to the conditions of the attached proposed Exemption 039-18144-00587.

Appendix A: Emission Calculations
Cyclone

Company Name: **Counter Top Division of Forest River, Inc.**
Address City IN Zip: **16829 Hackberry Dr, Goshen IN 46528**
Exemption: **039-18144**
Plt ID: **039-00587**
Reviewer: **Craig J. Friederich**
Date: **October 27, 2003**

Unit ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	PM Emission Rate before Controls (lb/hr)	PM Emission Rate before Controls (tons/yr)	PM Emission Rate after Controls (lb/hr)	PM Emission Rate after Controls (tons/yr)
Cyclone	50.0%	0.0040	4730	0.32	1.42	0.1622	0.710

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: **Counter Top Division of Forest River, Inc.**
Address City IN Zip: **16829 Hackberry Dr, Goshen IN 46528**
Permit Number: **039-18144**
Plt ID: **039-00587**
Eight (8) Space Heaters **Reviewer:** **Craig J. Friederich**
Date: **October 27, 2003**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
1.28	11

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	0.600	100 **see below	5.50	84.0
Potential Emission in tons/yr	0.011	0.043	0.003	0.561	0.031	0.471

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See page 3 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: **Counter Top Division of Forest River, Inc.**
Address City IN Zip: **16829 Hackberry Dr, Goshen IN 46528**
Permit Number: **039-18144**
Plt ID: **039-00587**
Reviewer: **Craig J. Friederich**
Date: **October 27, 2003**

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	0.002	0.001	0.075	1.80	0.003
Potential Emission in tons/yr	0.0000	0.0000	0.000	0.010	0.0000

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	
Emission Factor in lb/MMcf	0.001	0.001	0.001	0.0004	0.002	**Total**
Potential Emission in tons/yr	0.0000	0.0000	0.0000	0.00000	0.0000	**0.011**

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: **Counter Top Division of Forest River, Inc.**
Address City IN Zip: **16829 Hackberry Dr, Goshen IN 46528**
Permit Number: **039-18144**
Plt ID: **039-00587**
Permit Reviewer: **Craig J. Friederich**
Date: **October 27, 2003**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Benzene	Weight % Hexane	Weight % Glycol Ethers	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Benzene Emissions (ton/yr)	Hexane Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)
T283 Adhesive	6.62	0.000198	400.00	0.00%	10.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00	0.229	0.00	0.00	0.229	0.00	0.00
Lacquer Thinner	7.01	0.000198	400.00	0.00%	60.00%	0.00%	0.00%	0.00%	0.00%	30.00%	0.00	1.46	0.00	0.00	0.00	0.00	0.729
WPL 12765 Stain	7.75	0.000038	400.00	0.51%	18.54%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.09	0.00	0.00	0.00	0.00	0.00
WPW423DF Stain	11.75	0.000038	400.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DAP Glue	9.08	0.000198	400.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total State Potential Emissions											**0.00**	**1.46**	**0.00**	**0.00**	**0.229**	**0.00**	**0.729**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: **Counter Top Division of Forest River, Inc.**
Address City IN Zip: **16829 Hackberry Dr, Goshen IN 46528**
Permit Number: **039-18144**
Plt ID: **039-00587**
Reviewer: **Craig J. Friederich**
Date: **October 27, 2003**

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
T283 Adhesive	6.62	81.500%	34.4%	47.1%	34.4%	18.50%	0.00020	400.000	4.75	3.12	0.25	5.93	1.08	0.11	16.87	75%
Lacquer Thinner	7.01	100.000%	20.0%	80.0%	20.0%	0.00%	0.00020	400.000	7.01	5.61	0.44	10.65	1.94	0.00	n/a	100%
WPL 12765 Stain	7.75	73.720%	20.0%	53.7%	20.0%	17.90%	0.00004	400.000	5.20	4.16	0.06	1.50	0.27	0.00	23.26	100%
WPW423DF Stain	11.8	3.58%	0.0%	3.6%	0.0%	96.00%	0.00004	400.000	0.42	0.42	0.01	0.15	0.03	0.00	0.44	100%
DAP Glue	9.08	0.50%	0.0%	0.5%	0.0%	98.60%	0.00020	400.000	0.05	0.05	0.00	0.09	0.02	0.00	0.05	100%
									PM Control Efficiency:	0.00%						
State Potential Emissions			**Add worst case coating to all solvents**							**Uncontrolled**	**0.44**	**10.65**	**1.94**	**0.11**		
										Controlled	**0.44**	**10.65**	**1.94**	**0.11**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used